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翌勝電子股份有限公司

TIM TSAI



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 EDAC POWER ELECTRONICS CO LTD
 11TH FL-2, 150 JIAN YI RD
 CHUNG HO DISTRICT
 NEW TAIPEI
 235 TAIWAN

Date: 2018/12/01
 Subscriber: 847279001
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 File No: E209833
 Project No: 4788662111
 PD No: 18055381
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 PO Number:

Subject: **Procedure And/Or Report Material**

The following material resulting from the investigation under the above numbers is enclosed.

Issue

<u>Date</u>	<u>Vol</u>	<u>Sec</u>	<u>Pages</u>	<u>Revised Date</u>
2018/11/16	3	4	Cert of Compliance	
2018/11/16	3	4	Description Page(s)	

PO 1711153 & 1711154 (Project4788662111)

Please file revised pages and illustrations in place of material of like identity. New material should be filed in its proper numerical order.

NOTE: Follow-Up Service Procedure revisions DO NOT include Cover Pages, Test Records and Conclusion Pages. Report revisions DO NOT include Authorization Pages, Indices, Section General Pages and Appendixes.

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TPI File

CERTIFICATE OF COMPLIANCE

Certificate Number 20181124-E209833
Report Reference E209833-20181116
Issue Date 2018-November-24

Issued to: EDAC POWER ELECTRONICS CO LTD
11TH FL-2, 150 JIAN YI RD
CHUNG HO DISTRICT
NEW TAIPEI
235 TAIWAN

**This certificate confirms that
representative samples of**

Power Supplies for use in Audio/Video, Information and
Communication Technology Equipment

AC Adaptors; EA1068xy, EA1068xywwwww, (x can be 1, 3;
y can be can be A, B, C, D, E, F, G, g, H, J, K, W, M, N, P,
Q, R, Y, S, U, V, L or T; w can be 0-9, a-z, A-Z, "-")

Have been investigated by UL in accordance with the
Standard(s) indicated on this Certificate.

Standard(s) for Safety:

UL 62368-1, Audio/video, Information and Communication
Technology Equipment - Part 1: Safety Requirements
CAN/CSA C22.2 No. 62368-1-14, Audio/video, Information
and Communication Technology Equipment - Part 1: Safety
Requirements

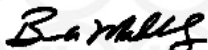
Additional Information:

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Bruce Mahrenholz, Director North American Certification Program

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File E209833
Project 4788662111

November 16, 2018

REPORT

on

Audio/video, Information and Communication Technology Equipment

EDAC POWER ELECTRONICS CO LTD
NEW TAIPEI, TAIWAN

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UL TEST REPORT AND PROCEDURE

Standard:	UL 62368-1, 2nd Edition, 2014-12-01 (Audio/video, Information and Communication Technology Equipment - Part 1: Safety Requirements) CAN/CSA C22.2 No. 62368-1-14, 2nd Edition, 2014-12 (Audio/video, Information and Communication Technology Equipment - Part 1: Safety Requirements)
Certification Type:	Listing
CCN:	QQJQ, QQJQ7 (Power Supplies for use in Audio/Video, Information and Communication Technology Equipment)
Product:	AC Adaptors
Model:	EA1068xy, EA1068xywwwww, (x can be 1, 3; y can be can be A, B, C, D, E, F, G, g, H, J, K, W, M, N, P, Q, R, Y, S, U, V, L or T; w can be 0-9, a-z, A-Z, "-")
*Rating:	I/P: 100-240V~, 50-60Hz , 2.0 A O/P: See Illustration 23 for details.
Applicant Name and Address:	EDAC Power Electronics Co., Ltd. 11-2F, No. 150, Jian Yi Rd. 235 Chung Ho District, New Taipei City TAIWAN

This is to certify that representative samples of the products covered by this Test Report have been investigated in accordance with the above referenced Standards. The products have been found to comply with the requirements covering the category and the products are judged to be eligible for Follow-Up Service under the indicated Test Procedure. The manufacturer is authorized to use the UL Mark on such products which comply with this Test Report and any other applicable requirements of UL LLC ('UL') in accordance with the Follow-Up Service Agreement. Only those products which properly bear the UL Mark are considered as being covered by UL's Follow-Up Service under the indicated Test Procedure.

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Prepared by: Stephen Ho

Reviewed by: Daniel Hsueh

Supporting Documentation

The following documents located at the beginning of this Procedure supplement the requirements of this Test Report:

- A. Authorization - The Authorization page may include additional Factory Identification Code markings.
- B. Generic Inspection Instructions -
 - i. Part AC details important information which may be applicable to products covered by this Procedure. Products described in this Test Report must comply with any applicable items listed unless otherwise stated in the body of this Test Report
 - ii. Part AE details any requirements which may be applicable to all products covered by this Procedure. Products described in this Test Report must comply with any applicable items listed unless otherwise stated in the body of each Test Report
- C. Listing Mark/Recognized Component Mark Data Page - details the requirements for the UL Certification Mark which is not controlled by the technical standard used to investigate these products. Products are permitted to bear only the Certification Mark(s) corresponding to the countries for which it is certified, as indicated in each Test Report.

Product Description

The product is a AC Adaptors intended for use with audio/video, information and communication technology equipment. All electrical components are mounted on PCB and housed with plastic enclosure by ultrasonic welding.

All models complied with the Limited Power Sources Test (Annex Q.1), except for models EA1068xW, EA1068xWwwwww, EA1068xS, EA1068xSwwwww.

Model Differences:

In the series models EA1068xy, EA1068xywwwww, where 'x' can be 1 or 3 to denote different inlet type, 1 to denote C14 type, 3 to denote C6 type; 'y' can be A, B, C, D, E, F, G, g, H, J, K, W, M, N, P, Q, R, Y, S, U, V, L or T to denote different output voltage range; 'w' can be 0-9, a-z, A-Z, '-' or blank to denote different client for marketing purpose.

All models are similar except for model name, input rating, output rating, transformer (T1) and PCB layout, refer to below description and tables on Illustration 23 for details.

There are three alternative circuit and PCB layout (A or B or C):

PCB layout A and B are similar except for secondary circuit, secondary layout design; PCB layout C is similar to PCB A except for minor difference primary circuit and layout and RC circuit.

There are four different constructions (AH, AL, BH, BL) for all models, see below for details:

- Construction AH: Using with EMI Shielding A1, Top Heat Sink, Insulation sheet 1, Y1 type capacitor for CY2, and Bonding Wire.

EMI Shielding A1 is soldered on solder side of PCB, secondary side soldered to secondary side of CY2. Bonding Wire, one end soldered to earth terminal of Appliance Inlet, other end soldering to PCB of secondary side of CY2.

- Construction AL: Using with EMI Shielding A2 and EMI Shielding B, Insulation sheet 2, Y1 type capacitor for CY2, and Bonding Wire.

EMI Shielding A2 is soldered on solder side of PCB, secondary side soldered to secondary side of CY2. Bonding Wire, one end soldered to earth terminal of Appliance Inlet, other end soldering to PCB of secondary side of CY2.

EMI Shielding B is snap-fit to EMI Shielding A2.

- Construction BH: Using with EMI Shielding C1, Top Heat Sink, Insulation sheet 1, Y1 type capacitor for

CY2. EMI Shielding C1 is soldered on solder side of PCB, primary side soldered to earth terminal of appliance inlet; secondary side soldered to secondary of CY1/jumper wire (Shielding C1 is functional earthing and isolated from primary circuits by double insulated.)

- Construction BL: Using with EMI Shielding C2 and EMI Shielding B, Insulation sheet 2, Y1 type capacitor for CY2. EMI Shielding C2 is soldered on solder side of PCB, primary side soldered to earth terminal of appliance inlet; secondary side soldered to secondary of CY1/jumper wire. EMI Shielding B is snap-fit to EMI Shielding C2. (Shielding B and C2 is functional earthing and isolated from primary circuits by double insulated.)

Construction AH and Construction BH can be using for models output rating 12 V to 56 V.

Construction AL and Construction BL can be using for models output rating 5 V to 9 V.

See Illustration 23 for Model lists details.

Test Item Particulars (NOT FOR FIELD REPRESENTATIVE'S USE)

Classification of installation and use by..... : Ordinary person Instructed person
 Skilled person Children likely to be present

Supply Connection : pluggable equipment type A type B
 permanent connection
 detachable power supply cord
 non-detachable power supply cord
 not directly connected to the mains
 - ES1 ES2 ES3

Equipment mobility..... : movable hand-held transportable
 stationary for building-in direct plug-in
 rack-mounting wall-mounted

Over voltage category (OVC) : OVC I OVC II OVC III OVC IV
 other: _____

Fundamental Frequency..... : 50/60 Hz 50 Hz 60 Hz other 50-60 Hz
 N/A:

Class of equipment : Class I Class II Class III
 Not classified
 Class II with functional earthing

Access location : restricted access location N/A

Pollution degree (PD) : PD 1 PD 2 PD 3
 other: _____

IP protection class : IP X0 IP _____

Tested for IT power systems : Yes No other: _____

IT testing, phase-phase voltage (V) : _____ N/A

Altitude during operation (m) : Up to 2,000 Up to 5000

Altitude of test laboratory (m) : Less than 2,000 Approximately _____

Mass of equipment (kg) : 0.138 kg

Technical Consideration (NOT FOR FIELD REPRESENTATIVE'S USE)

- The product was submitted and evaluated for use at the maximum ambient temperature (Tma) permitted by the manufacturer's specification of: 40 degree C
- The product is intended for use on the following power systems: TN
- Considered current rating of protective device as part of the building installation (A) : 20 A

- Mains supply tolerance (%) or absolute mains supply values : +10%, -10%
- Mains The equipment disconnect device is considered to be: Appliance Inlet
- The following circuit locations (with circuit/schematic designation) were investigated as a limited power source (LPS): Output ports (Except models EA1068xW, EA1068xWwwwww, EA1068xS, EA1068xSwwwww.)
- The following are available from the Applicant upon request: Installation (Safety) Instructions / Manual.
 - Clearance values have been evaluated for an operating altitude of -61m (-200fts) to 5000m (16404 fts), based on Table 17 altitude adjustment factor 1.48. The equipment is not for use in aircraft.

Additional Information

- N/A

Additional Standard

- CAN/CSA-C22.2 No.62368-1-14: 2014-12, IEC 62368-1:2014 (Second Edition)

Markings, instructions and instructional safeguards						
Clause Title	Marking or Instruction Details					
	English			French		
Equipment identification marking – Manufacturer identification	Listee's or Recognized company's name, Trade Name, Trademark or File Number					
Equipment identification marking – model identification	Model Number					
Equipment rating marking –ratings	Input Ratings (voltage, frequency/dc, current/power) Output Ratings (voltage, frequency/dc, current/power)					
Fuses – Rating	Rated current and voltage and type located on or adjacent to fuse or fuseholder.					
LPS Marking (Optional)	Marked "LPS" or "Limited Power Source". (except for models EA1068xW, EA1068xWwwwww, EA1068xS, EA1068xSwwwww)					
Special Instructions to UL Representative						
Inspect the transformer(s) listed in Production Line Testing Requirements per AA1.1- (C). When the tests are conducted at other location, inspect test record and specification sheet provided by the component manufacturer. Verify the specification sheet indicates 100% routine test specified in Production Line Testing Requirements is conducted at the component manufacturer.						
Production-Line Testing Requirements						
<u>Electric Strength Test Special Constructions - Refer to Generic Inspection Instructions, Part AC for further information.</u>						
Model	Component	Removable Parts	Test probe location	V rms	V dc	Test Time, s
All Models	Transformer (T1)	N/A	Primary to Secondary	3000	4200	1
<u>Earthing Continuity Test Exemptions - This test is not required for the following models:</u>						
--						
<u>Electric Strength Test Exemptions - This test is not required for the following models:</u>						
--						
<u>Electric Strength Test Component Exemptions - The following solid-state components may be disconnected from the remainder of the circuitry during the performance of this test:</u>						
--						
<u>Sample and Test Specifics for Follow-Up Tests at UL</u>						
Model	Component	Material	Test	Sample(s)	Test Specifics	
N/A						

4.1.2	TABLE: list of critical components					Pass
Object/Part or Description	Manufacturer/ Trademark	Type/Model	Technical Data	Product Category CCN	Marks of Conformity - Required for FUS	Marks of Conformity - All Others
01. AC inlet (CN1) (For Model with X = 1)	Rong Feng Industrial Co Ltd	SS-120	10A, 250 Vac (C14 type)	AXUT2/8	UL	--
01a. AC inlet (CN1) (For Model with X = 1) (Alternate)	Tecx-Unions Electronic Co.,Ltd.	TU-301-SP	10A, 250 Vac (C14 type)	AXUT2/8	UL	--
01b. AC inlet (CN1) (For Model with X = 1) (Alternate)	Solteam Electronics Co., Ltd.	ST-01	10/15A, 125/250 Vac (C14 type)	AXUT2/8	UL	--
01c. AC inlet (CN1) (For Model with X = 1) (Alternate)	Canal Electronic Co Ltd	KS-405	10A, 250 Vac (C14 type)	AXUT2/8	UL	--
01d. AC inlet (CN1) (For Model with X = 1) (Alternate)	Rich Bay Company Ltd.	R-301	10A, 250 Vac (C14 type)	AXUT2/8	UL	--
01e. AC inlet (CN1) (For Model with X = 1) (Alternate)	Zhejiang LECI Electronics Co., LTD	DB-14	15A, 250 Vac (C14 type)	AXUT2/8	UL	--
01f. AC inlet (CN1) (For Model with X = 1) (Alternate)	HCR ELECTRONICS CO., LTD.	SK01	15A, 250 Vac (C14 type)	AXUT2/8	UL	--
02. AC inlet (CN1) (For Model with X = 3)	Rong Feng Industrial Co Ltd	RF-190	2.5A, 250 Vac (C6 type)	AXUT2/8	UL	--
02a. AC inlet (CN1) (For Model with X = 3) (Alternate)	Tecx-Unions Electronic Co.,Ltd.	TU-333	2.5A, 250 Vac (C6 type)	AXUT2/8	UL	--
02b. AC inlet (CN1) (For Model with X = 3) (Alternate)	Solteam Electronics Co., Ltd.	ST-03	2.5A, 250 Vac (C6 type)	AXUT2/8	UL	--
02c. AC inlet (CN1) (For Model with X = 3) (Alternate)	Rich Bay Company Ltd.	R-30790	2.5A, 250 Vac (C6 type)	AXUT2/8	UL	--
02d. AC inlet (CN1) (For Model with X = 3)	Zhejiang LECI Electronics Co.,	DB-6	2.5A, 250 Vac (C6 type)	AXUT2/8	UL	--

(Alternate)	LTD					
02e. AC inlet (CN1) (For Model with X = 3) (Alternate)	HCR ELECTRONICS CO., LTD.	SK03	2.5A, 250 Vac (C6 type)	AXUT2/8	UL	--
02. AC inlet (CN1) (For Model with X = 3) (Alternate)	INALWAYS CORP	0724	2.5A, 250 Vac (C6 type)	AXUT2/8	UL	--
03. Bridge Diode (BD1)	--	--	Rating minimum 2 A, minimum 600 V	--	--	--
04. Bulk Capacitor (C6)	--	--	Rated 68-150uF, minimum 400 V, minimum 105 degree C.	--	--	--
05. Fuse (F1)	Interchangeable	Interchangeable	T3.15A, 250Vac	JDYX/7	UL	--
05a. Fuse (F1) (alternate)	Interchangeable	Interchangeable	T3.15 A, 250 V, complying IEC 60127	JDYX2/8	UL	VDE
05b. Fuse (F1) (alternate)	Bel Fuse Inc	RST,MRT	T3.15 A, 250 V	JDYX2/8	UL	--
05c. Fuse (F1) (alternate)	Walter Electronic Co Ltd	2010,	T3.15 A, 250 V	JDYX2/8	UL	--
05d. Fuse (F1) (alternate)	Littelfuse Wickmann Werke	392	T3.15 A, 250 V	JDYX2/8	UL	--
05e. Fuse (F1) (alternate)	Conquer Electronics Co Ltd	UDA-A, UDA, MST,MET	T3.15 A, 250 V	JDYX2/8	UL	--
05f. Fuse (F1) (alternate)	Littelfuse Inc.	215	T3.15 A, 250 V	JDYX2/8	UL	--
05g. Fuse (F1) (alternate)	Walter Electronic Co Ltd	TSC, TSC	T3.15 A, 250 V	JDYX2/8	UL	--
05h. Fuse (F1) (alternate)	Walter Electronic Co Ltd	ICP	T3.15 A, 250 V	JDYX/7	UL	--
05i. Fuse (F1) (alternate)	XC Electronics (Shenzhen) Co., Ltd.	5TR	T3.15 A, 250 V	JDYX2/8	UL	--
05j. Fuse (F1) (alternate)	XC Electronics (Shenzhen) Co., Ltd.	5TE	T3.15 A, 250 V	JDYX/7	UL	--
06. Inductor (LF1)	Interchangeable	Interchangeable	Rated minimum 105 degree C. Toroidal type construction. See Illustration-01 for construction details.	--	--	--
06-1. Windings of	Interchangeable	Interchangeable	Rated min. 105 degree C.	OBMW2	UL	--

Inductor (LF1)						
07. Inductor (LF2)	Interchangeable	Interchangeable	Rated minimum 105 degree C. Toroidal type construction. See Illustration-02 for construction details.	--	--	--
07-1. Windings of Inductor (LF2)	Interchangeable	Interchangeable	Rated min. 105 degree C.	OBMW2	UL	--
08. X-Capacitor (CX1) for PCB layouts A, B (Optional)	Carli Electronics Co Ltd	MPX	Max 0.47 μ F, min 250 V, X1 or X2 type, minimum 100 degree C.	FOWX2/8	UL	VDE
08a. X-Capacitor (CX1) for PCB layouts A, B (Optional) (Alternate)	ISKRA SISTEMI, D D	KNB 1530, KNB 1532, KNB 1533	Max 0.47 μ F, min 250 V, X1 or X2 type, minimum 100 degree C.	FOWX2/8	UL	VDE
08b. X-Capacitor (CX1) for PCB layouts A, B (Optional) (Alternate)	ISKRA SISTEMI, D D	KNB 1560, KNB 1562, KNB 1563	Max 0.47 μ F, min 250 V, X1 or X2 type, minimum 100 degree C.	FOWX2/8	UL	VDE
08c. X-Capacitor (CX1) for PCB layouts A, B (Optional) (Alternate)	Europtronic (Taiwan) Industrial Corp	MPX	Max 0.47 μ F, min 250 V, X1 or X2 type, minimum 100 degree C.	FOWX2/8	UL	VDE
08d. X-Capacitor (CX1) for PCB layouts A, B (Optional) (Alternate)	Pilkor Electronics Co Ltd	PCX2 335M	Max 0.47 μ F, min 250 V, X1 or X2 type, minimum 100 degree C.	FOWX2/8	UL	VDE
08e. X-Capacitor (CX1) for PCB layouts A, B (Optional) (Alternate)	Zhuhai Sung Ho Electronics Co Ltd	CMPP	Max 0.47 μ F, min 250 V, X1 or X2 type, minimum 100 degree C.	FOWX2/8	UL	VDE
08f. X-Capacitor (CX1) for PCB layouts A, B (Optional) (Alternate)	Guangzhou Yes Electronic Technology Co Ltd	MPX/MKP	Max 0.47 μ F, min 250 V, X1 or X2 type, minimum 100 degree C.	FOWX2/8	UL	VDE
08g. X-Capacitor (CX1) for PCB layouts A, B (Optional) (Alternate)	Shantou High-new	MPX	Max 0.47 μ F, min 250 V, X1 or X2 type, minimum 100 degree C.	FOWX2/8	UL	VDE
08h. X-Capacitor (CX1) for PCB layout C (Optional)	Carli Electronics Co Ltd	MPX	Max 0.22 μ F, min 250 V, X1 or X2 type, minimum 100 degree C.	FOWX2/8	UL	VDE
08i. X-Capacitor (CX1) (Optional) (Alternate)	ISKRA SISTEMI, D D	KNB 1530, KNB 1532, KNB 1533	Max 0.22 μ F, min 250 V, X1 or X2 type, minimum 100 degree C.	FOWX2/8	UL	VDE
08j. X-Capacitor (CX1) for PCB layout C (Optional) (Alternate)	ISKRA SISTEMI, D D	KNB 1560, KNB 1562, KNB 1563	Max 0.22 μ F, min 250 V, X1 or X2 type, minimum 100 degree C.	FOWX2/8	UL	VDE

08k. X-Capacitor (CX1) for PCB layout C (Optional) (Alternate)	Europtronic (Taiwan) Industrial Corp	MPX	Max 0.22 μ F, min 250 V, X1 or X2 type, minimum 100 degree C.	FOWX2/8	UL	VDE
08l. X-Capacitor (CX1) for PCB layout C (Optional) (Alternate)	Pilkor Electronics Co Ltd	PCX2 335M	Max 0.22 μ F, min 250 V, X1 or X2 type, minimum 100 degree C.	FOWX2/8	UL	VDE
08m. X-Capacitor (CX1) for PCB layout C (Optional) (Alternate)	Zhuhai Sung Ho Electronics Co Ltd	CMPP	Max 0.22 μ F, min 250 V, X1 or X2 type, minimum 100 degree C.	FOWX2/8	UL	VDE
08n. X-Capacitor (CX1) for PCB layout C (Optional) (Alternate)	Guangzhou Yes Electronic Technology Co Ltd	MPX/MKP	Max 0.22 μ F, min 250 V, X1 or X2 type, minimum 100 degree C.	FOWX2/8	UL	VDE
08o. X-Capacitor (CX1) for PCB layout C (Optional) (Alternate)	Shantou High-new	MPX	Max 0.22 μ F, min 250 V, X1 or X2 type, minimum 100 degree C.	FOWX2/8	UL	VDE
09. Bleeder Resistor (R7, R8) (for PCB A, B)	TZAI YUAN ENTERPRISE CO LTD	HSMD series, SMD series	Each rated 1M ohm, minimum 1/4 W.	AZOP2/8	UL	--
09a. Bleeder Resistor (R7, R8) (for PCB A, B) (alternate)	Ralec Electronic Corp	RTV05	Each rated 1M ohm, minimum 1/4 W.	--	UL Demko (IEC 62368-1)	--
09b. Bleeder Resistor (R7, R8, R11, R12) (for PCB C only)	Interchangeable	Interchangeable	Each rated 1.5M ohm, minimum 1/4 W.	--	--	--
10. Y-Capacitor (CY2) (Optional)	TDK-EPC Corporation	CD	CY2 rated maximum 2200pF, minimum 250 V, Y1 type, minimum 100 degree C.	FOWX2/8	UL	VDE
10b. Y-Capacitor (CY2) (Optional) (Alternate)	Walsin Technology Corp	AH	CY2 rated maximum 2200pF, minimum 250 V, Y1 type, minimum 100 degree C.	FOWX2/8	UL	VDE
10c. Y-Capacitor (CY2) (Optional) (Alternate) (For Construction AH and AL only)	TDK-EPC Corporation	CS	CY2 rated maximum 2200pF, minimum 250 V, Y2 type, minimum 100 degree C.	FOWX2/8	UL	VDE
10d. Y-Capacitor (CY2) (Optional) (Alternate) (For Construction AH and AL only)	Walsin Technology Corp	AC	CY2 rated maximum 2200pF, minimum 250 V, Y2 type, minimum 100 degree C. Certified by VDE. (Compliance with IEC 60384- 14).	FOWX2/8	UL	VDE

10e. Y-Capacitor (CY2) (Optional) (Alternate) (For Construction AH and AL only)	Walsin Technology Corp	SB,SF	CY2 rated maximum 1000 pF, minimum 250 V, Y2 type, minimum 100 degree C. Certified by VDE. (Compliance with IEC 60384- 14).	FOWX2/8	UL	VDE
	Shantou High-new	CE	CY2 rated maximum 1000 pF, minimum 250 V, Y2 type, minimum 100 degree C. Certified by VDE. (Compliance with IEC 60384- 14).	FOWX2/8	UL E208107	VDE 4002574
	WELSON	WD	CY2 rated maximum 1000 pF, minimum 250 V, Y2 type, minimum 100 degree C. Certified by VDE. (Compliance with IEC 60384- 14).	FOWX2/8	UL E104572	VDE:40016157
11. Transistor (Q5)	Interchangeable	Interchangeable	Rated minimum 4A, minimum 500 V.	FOWX2/8	UL	VDE
12. Optical Isolator (U1)	Sharp Corp., Electronic Components Group	PC123	Rated isolation min. 5000Vac, minimum 100 degree C	FOWX2/8	UL	VDE
12a. Optical Isolator (U1) (Alternate)	Lite-On Technology Corp.	LTV-817M	Rated isolation min. 5000Vac, minimum 100 degree C	FOWX2/8	UL	VDE
12b. Optical Isolator (U1) (Alternate)	Cosmo Electronics Corp	K1010	Rated isolation min. 5000Vac, minimum 100 degree C	FOWX2/8	UL	VDE
12c. Optical Isolator (U1) (Alternate)	Vishay Semiconductor GmbH	TCET1110, TCET1111, TCET1112, TCET1113, TCET1114, TCET1115, TCET1116, TCET1117, TCET1118, TCET1119	Rated isolation min. 5000Vac, minimum 100 degree C	FOWX2/8	UL	VDE
12d. Optical Isolator (U1) (Alternate)	Lite-On Technology Corp.	LTV-817	Rated isolation min. 5000Vac, minimum 100 degree C	FOWX2/8	UL	VDE

12e. Optical Isolator (U1) (Alternate)	Everlight Electronics Co Ltd	EL817	Rated isolation min. 5000Vac, minimum 100 degree C	FOWX2/8	UL	VDE
12f. Optical Isolator (U1) (Alternate)	Renesas Electronics Corporation	PS2561 series	Rated isolation min. 5000Vac, minimum 100 degree C	FOWX2/8	UL	VDE
13. Transformer (T1) (For output voltage 5V to 9V)	--	(P/N 183-461)	Class B, Open type construction. Core: Ferrite. Overall 26.7 mm by 22.6 mm by 18.8 mm. See Illustration-03 for construction details.	--	--	--
13a. Transformer (T1) (For output voltage 12V to 16V)	--	(P/N 183-462)	Class B, Open type construction. Core: Ferrite. Overall 26.7 mm by 22.6 mm by 18.8 mm. See Illustration-04 for construction details.	--	--	--
13b. Transformer (T1) (For output voltage 18V to 24V)	--	(P/N 183-459)	Class B, Open type construction. Core: Ferrite. Overall 26.7 mm by 22.6 mm by 18.8 mm. See Illustration-05 for construction details.	--	--	--
13c. Transformer (T1) (For output voltage 32V to 42V)	--	(P/N 183-460)	Class B, Open type construction. Core: Ferrite. Overall 26.7 mm by 22.6 mm by 18.8 mm. See Illustration-06 for construction details.	--	--	--
13d. Transformer (T1) (For output voltage 44V to 56V)	--	(P/N 183-466)	Class B, Open type construction. Core: Ferrite. Overall 26.7 mm by 22.6 mm by 18.8 mm. See Illustration-07 for construction details.	--	--	--
14. Transformer (T1)	Edac Power Electronics Co Ltd	EDACB3	Class B.	OBJY2	UL	--
14-1. Bobbin	Sumitomo Bakelite Co Ltd	PM-9820	Phenolic, minimum 1.0 mm thick, rated minimum V-0, 150 degree C.	QMFZ2	UL	--
14-1a. Bobbin	Chang Chun Plastics Co., Ltd.	T375J	Phenolic, minimum 1.0 mm thick, rated minimum V-0, 150 degree C	QMFZ2	UL	--
14-2. Windings	Interchangeable	Interchangeable	Rated minimum 130 degree C.	OBMW2	UL	--

14-3. Triple Insulated Wire	Great Leoflon industrial co ltd	TRW(B)-M-(A thru. E, H)	Rated 130 degree C.	OBJT2	UL	--
14-4. Insulation Tape	3M Company Electrical Markets DIV (EMD)	1350F-1, 44(a)	Rated 130 degree C.	OANZ2	UL	--
14-4a. Insulation Tape (Alternate)	Jingjiang Yahua Pressure Sensitive Glue Co Ltd	CT	Rated 130 degree C.	OANZ2	UL	--
14-5. Teflon tubing	Great holding industrial co ltd	TFL	Rated 200 degree C.	YDPU2	UL	--
14-6. Varnish	John c Dolph co	BC-346A	Rated minimum 130 degree C.	OBOR2	UL	--
14-6a. Varnish (Alternate)	Elantas Electrical Insulation Elantas pdg inc	V1630, V1630FS, V1630FS50, V1630FS	Rated minimum 130 degree C.	OBOR2	UL	--
15. Printed Wiring Board	Interchangeable	Interchangeable	Rated minimum V-1, minimum 130 degree C.	ZPMV2	UL	--
16. Heat Sink (HS1)	--	--	Aluminum, See Illustration-08 for dimension details. (Heat Sink is primary)	--	--	--
17. Heat Sink (HS2)	--	--	Aluminum, See Enclosure Illustration-09 for dimension details. (Heat Sink is secondary)	--	--	--
18. Top Heat Sink	--	--	Aluminum, See Enclosure Illustration-10 for dimension details. (Top Heat Sink is primary) The heat sink secured with HS1 by screw.	--	--	--
19. Insulation Sheet 1	--	--	Minimum. 0.4mm thickness. See Illustration-12 for dimension details.	--	--	--
19-1. Insulation Sheet 2	--	--	Minimum. 0.4mm thickness. See Illustration-11 for dimension details.	--	--	--
20. Material of Insulation Sheets	Mianyang Longhua Film Co., Ltd	PP-(i)(j)	Rated min. V-0, 105 degree C	QMFZ2	UL	--
20a. Material of Insulation Sheet	ITW Electronics Components/	FORMEX EP-(a)(d)(f2)	Rated min. V-0, 115 degree C	QMFZ2	UL	--

(Alternate)	Products (Shanghai) Co Ltd					
20b. Insulation Sheet. (Alternate)	Chengdu Kanglongxin Plastics Co Ltd	KLX PP BK-10	Rated min. V-0, 110 degree C	QMFZ2	UL	--
20c. Insulation Sheet. (Alternate)	SHENZHEN XING FU CHENG APPLIED MATERIALS CO LTD	XFCPC- EFR9970B	Rated min. V-0, 110 degree C	QMFZ2	UL	
21. EMI Shielding C2	--	--	Aluminum, See Illustration-13 for dimension details.	--	--	--
21-1. EMI Shield A2	--	--	Aluminum, See Illustration-14 for dimension details.	--	--	--
21-2. EMI Shielding C1	--	--	Aluminum, See Illustration-15 for dimension details.	--	--	--
21-3. EMI Shielding A1	--	--	Aluminum, See Illustration-- 16 for dimension details.	--	--	--
21-4. EMI Shielding B	--	--	Aluminum, See Illustration-- 19 for dimension details.	--	--	--
22. Enclosure	Sabic Innovative Plastics Japan L L C	945 (GG)	Rated V-0, 120 degree C. Minimum 2.2 mm thickness. Two pieces construction secured together by ultrasonic welding. See Illustration-17 for dimension details.	QMFZ2	UL	--
23. Label	Interchangeable	Interchangeable	Rated minimum 100 degree C. Suitable for surface applied to plastic enclosure.	PGDQ2 or PGJI2	UL	--
24. Output Cable	Interchangeable	Interchangeable	FEP, PTFE, PVC, TFE neoprene, polyimide, SPT-1, SPT-2 or marked VW-1, minimum 80 degree C, 300 V, minimum 18 AWG. Length 3.05 m maximum.	AVLV2, ZJCZ	UL	--
25. Strain Relief for Output	SILVER AGE ENGINEERING PLASTICS	730	Rated minimum V-1 Integral to Output Cable. Strain Relief provided with a molded-on	QMFZ2	UL	--

	(DONGGUAN) CO LTD		anti- kink bushing held in place by integral slots in top and bottom enclosure, opening approximate 6.7 by 9.7 mm. For Strain Relief. See Illustration-18 for construction details.			
26. Bonding Wire (For Construction AH and AL only)	Interchangeable	Interchangeable	Rated minimum 18 AWG, minimum 105 degree C, minimum 300 V, marked VW-1. Green and yellow lead used. One end mechanically secured and soldered to earth terminal of Appliance Inlet, other end mechanically secured and soldering to PWB at load side of CY2.	AVLV2	UL	--
27. Varistor (VAR1) (Optional)	Thinking Electronic Industrial Co Ltd	TVR10471K, TVR14471K	Rated 300 Vac. Rating 385Vdc.	VZCA2/8	UL	--
27a. Varistor (VAR1) (Optional) (Alternate)	Ceramate Technical Co Ltd	GNR14D471K, GNR10D471K	Rated 300 Vac. Rating 385Vdc.	VZCA2/8	UL	--
27b. Varistor (VAR1) (Optional) (Alternate)	Brightking (Shenzhen) Co Ltd	471KD14, 471KD10	Rated 300 Vac. Rating 385Vdc.	VZCA2/8	UL	--
27c. Varistor (VAR1) (Optional) (Alternate)	Joyin Co Ltd	14N471K	Rated 300 Vac. Rating 385Vdc.	VZCA2/8	UL	--
27d. Varistor (VAR1) (Optional) (Alternate)	Centra Science Corp	CNR-10V471K, CNR-14D471K	Rated 300 Vac. Rating 385Vdc.	VZCA2/8	UL	--
27e. Varistor (VAR1) (Optional) (Alternate)	Littelfuse Inc	SAS-471KD14, MOV-471KD14	Rated 300 Vac. Rating 385Vdc.	VZCA2/8	UL	--
27f. Varistor (VAR1) (Optional) (Alternate)	Success Electronics Co Ltd	SVR10D471K, SVR14D471K	Rated 300 Vac. Rating 385Vdc.	VZCA2/8	UL	--
27g. Varistor (VAR1) (Optional) (Alternate)	Guangdong South Hongming Electronic Science & Technology Co Ltd	ZVR10D471, ZVR14D471	Rated 300 Vac. Rating 385Vdc.	VZCA2/8	UL	--

ENCLOSURES

<u>Type</u>	<u>Supplement Id</u>	<u>Description</u>
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	Figure-02	External View - Front Side with Inlet C6 type
	Figure-03	External View - Rear Side.
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	Figure-05	Internal view top side (For Construction AH)-1.
	Figure-06	Internal view_top side (For Construction AH)-2
	Figure-07	Internal view_top side (For Construction AH)-3
	Figure-08	Internal view_bottom side (For Construction AH)
	Figure-09	Internal view top side with insulation sheet (For Construction AL)-1
	Figure-10	Internal view_top side with insulation sheet (For Construction AL) -2
	Figure-11	Internal view_top side (For Construction AL) -1
	Figure-12	Internal view_top side (For Construction AL) -2
	Figure-13	Internal view_bottom side (For Construction AL)
	Figure-14	Internal view_top side (For Construction BH)-1
	Figure-15	Internal view_top side (For Construction BH)-2
	Figure-16	Internal view_bottom side (For Construction BH)
	Figure-17	Internal view_top side with insulation sheet (For Construction BL)
	Figure-18	Internal view_top side (For Construction BL)
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	Figure-20	Internal view Trace side (For Construction AL and BL) (PCB layout A)
	Figure-21	Internal view Trace side (For Construction AH and BH) (PCB layout A)
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Illustrations	Illustration-01	Inductor Spec (LF1).
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